Introduction of the Series 2 Timor-Leste Consumer Price Index
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ABBREVIATIONS and ACRONYMS

CCFM  Consultative Committee on Financial Management
COICOP Classification of Individual Consumption according to Purpose
CPI   Consumer Price Index
HFCE  Household Final Consumption Expenditure
HIES  Household Income and Expenditure Survey
n.e.c. not elsewhere classified
n/a   not available
NSD   National Statistics Directorate of Timor-Leste
PREFACE

The purpose of this Information Paper is to describe the changes that have been made to the Timor-Leste Consumer Price Index (CPI) as a result of the 2012 review and reweighting of the index. The new index will be known as the Series 2 CPI. The first CPI publication on the new basis will be introduced in respect of January 2013, with the publication scheduled to be released on Friday, May 17, 2013, together with the CPI releases for February, March and April 2013. The reason for releasing a number of months at the same time has been to ensure that the new CPI is performing satisfactorily and so that the results for the first three months of 2013 could be compared with the first three months of 2012.

The first Timor-Leste CPI was compiled in 2001. It is the intention of the National Statistics Directorate of Timor-Leste (NSD) to maintain a program of periodic reviews of the CPI to ensure that it continues to remain relevant and accurate. The main objective of these reviews is to update the household expenditure information used to set the item weights in the CPI; the reviews also provide an opportunity to reassess the scope and coverage of the index.

This information paper provides an overview of the changes to the CPI that will be introduced with the new series from January 2013. It describes the household expenditure data used to calculate the weights in the CPI. The paper also presents the updated weighting patterns, details of the changes to the commodity classification of the index and some background on the major shifts in weights between the old and new series.

A mock–up of the revised format of the January 2013 release is reproduced (see Appendix 4) to provide users with advance notice of the changes that will be incorporated.

BACKGROUND

A major aspect of CPI reviews is to update the expenditure weights used in the compilation of the index. The new weights will be based on the household expenditure patterns derived from the 2011 Timor-Leste Survey of Household Income and Expenditure.

The CPI is one of the highest profile statistics compiled by a national statistics office. It is used as a headline measure of inflation, for wage and contract escalation, and in the compilation of the national accounts. It is also used extensively in analysis of the state of the economy. For these reasons, it is important that the community has confidence in the relevance and reliability of the CPI.

The CPI review looked at a range of other aspects of the CPI to ensure that it continues to be a reliable measure of price change in the economy. All of these matters are set out in the Information Paper - Review of the Timor-Leste CPI 2012: Issues for Consideration which was released by the then National Statistics Directorate of Timor-Leste (NSD) in November 2012.

NSD gave users an opportunity to express their views on the issues outlined in the information paper by holding a public seminar on the CPI review on 16 November 2012. Feedback from the user consultation process is summarised in Appendix 1.
KEY CHANGES IN SERIES 2 CPI

The introduction of the new series CPI heralds a different approach to constructing the Timor-Leste CPI. Rather than compiling a set of variable weighted indexes, the objective is now to produce a series of short–term fixed weighted indexes that will be regularly linked together to provide a single continuous measure of price change. This strategy will ensure that, at any point in time, the weighting patterns and item coverage of the CPI are relevant to user requirements and reflect contemporary economic conditions to the maximum extent possible.

Summary of changes

The Series 2 CPI includes a number of updates that will be incorporated from January 2013. The Series 2 CPI will be linked to the existing (Series 1) CPI providing a continuous measure of price change since December 2001 for Dili, and since June 2003 for all of Timor-Leste. In accordance with widely accepted international practice, the previously published All groups CPI will not be revised as a result of the updates. The key changes for the 2nd Series CPI are:

- The National (Timor-Leste) index will be published on a monthly basis from January 2013 rather than on a quarterly basis as in the past.
- New household expenditure weights have been derived from the 2011 Household Income and Expenditure Survey (HIES). Separate weighting patterns will be used for the National index, the Dili index, and the Ex-Dili index.
- The CPI commodity classification used to categorise the goods and services in the CPI has been updated to ensure it reflects contemporary wording and groupings. To enable greater international comparability, the classification will be aligned with the United Nations Classification of Individual Consumption according to Purpose (COICOP) where possible. There will be considerable re–naming and some re–ordering of the items in the classification.
- The coverage of household expenditure will remain largely the same as the previous series, although there will now be ten broad CPI groups (previously there was eight). This is a result of subdividing the groups Recreation and Education and Transport and Communication.
- Adoption of the more widely used geometric mean approach to calculate price change at the elementary aggregate level (price samples level). The geometric mean provides a better representation of household purchasing behaviour than the currently used formula, particularly where there is likely to be high substitutability in consumption within the price samples.

The remainder of this Information Paper provides details of the new CPI commodity classification, the new weighting pattern, and some other information about the Series 2 CPI.

NEW CPI COMMODITY CLASSIFICATION

The introduction of the Series 2 CPI has provided the opportunity to review and update the categories of goods and services used to construct the CPI. The new series commodity changes are shown in Appendix 2. In reviewing the classification, issues considered included user needs, consumer behaviour and international comparability. Items with relatively low weight such as ‘preserved fish’ and ‘fresh fish’ have been combined into ‘Fish and seafood’. To enable greater international comparability of price inflation, a review was undertaken to align where possible the CPI commodities with the United Nations Classification of Individual Consumption according to Purpose (COICOP).

As a result of the review, there has been considerable re–naming and some re–ordering of the items in the classification. Where changes to the CPI classification are indicated, they are one of the following types described below.

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New series

Some new series will be formed from splitting and/or combining existing series. These new series are listed below:

- Rice
- Fish and seafood
- Sugar, jam, honey, chocolate and confectionary
- Food products n.e.c
- Coffee, tea and cocoa
- Mineral waters, soft drinks, fruit and vegetable juices
- Household appliances
- Goods and services for routine household maintenance
- Medical products, appliances and equipment
- Medical and Hospital services
- Purchase of vehicles
- Operation of personal transport equipment
- Public transport services
- Audio-visual, photographic and information processing equipment
- Recreational items and cultural services
- Newspapers, books and stationery

Where there are no back data for these new series they will begin with an index reference period of December 2012 = 100.0

Series continuing, minor compositional change

Some series will have a small change to composition such as the removal or addition of a small component. For example the series Cereals, roots and their products has been renamed to Bread and cereals (excluding rice). It now excludes ‘rice’, and ‘tubers and roots’ but contains ‘bread, cakes and biscuits’. The expenditures for tubers and roots have been allocated to ‘Vegetables’.

Series continuing, name change or move in the classification order

Some series will be renamed and/or moved in the new series classification. These series will be linked to the previous series equivalent. For example the series Fish and seafood is linked to the old series Fresh fish to maintain a continuous series.
Discontinued series

Some existing series will no longer be available in the new series.

- Fresh fish (merged with 'Fish and seafood')
- Preserved fish (merged with 'Fish and seafood')
- Nuts (merged with 'Food products n.e.c.')
- Herbs and Spices (merged with 'Food products n.e.c.')
- Bread, cakes and biscuits (merged with 'Bread and cereals (excluding rice)')
- Non-alcoholic drinks (split into 2 series – ‘Coffee, tea and cocoa’ and ‘Mineral waters, soft drinks, fruit and vegetable juices’)
- Household furnishings (split into 2 series – ‘Household furniture and textiles’ and ‘Household appliances’)
- Health services and pharmaceuticals (split into 2 series – ‘Medical products, appliances and equipment’ and ‘Medical and Hospital services’)
- Personal care (merged with 'Goods and services for routine household maintenance')

The new index will begin with an index reference period of December 2012 = 100.0.

SERIES 2 NATIONAL CPI WEIGHTS AT THE GROUP LEVEL

An important objective of a CPI review is to update the CPI weighting patterns, which represent the average Timor-Leste household expenditure on goods and services. When analysing a new set of CPI weights compared with the previous set, it is important to note that the weights are relative to each other rather than being absolute. As a result, the weight of a product could fall, for example, even though the expenditure per household on the product has increased, because the increase is less than the average increase for all products. Products in the CPI include both goods and services purchased by households.

The CPI weights reflect the relative expenditures of the CPI population group as a whole and not those of any particular type or size of household. The weights reflect average expenditure of households and not the expenditure of an ‘average household’. The new series CPI relative weights for the ten CPI groups are shown in the last column of Table 1.
TABLE 1. Group weights for Timor-Leste CPI

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
</tr>
<tr>
<td>FOOD AND NON-ALCOHOLIC BEVERAGES</td>
<td>56.5</td>
<td>63.9</td>
<td>64.3</td>
<td></td>
</tr>
<tr>
<td>ALCOHOL AND TOBACCO</td>
<td>4.8</td>
<td>4.2</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>CLOTHING AND FOOTWEAR</td>
<td>8.9</td>
<td>7.2</td>
<td>5.9</td>
<td></td>
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<tr>
<td>HOUSING</td>
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<td>9.9</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE</td>
<td>7.9</td>
<td>4.7</td>
<td>4.1</td>
<td></td>
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<tr>
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<td>3.6</td>
<td>6.4</td>
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<td>COMMUNICATION</td>
<td>1.0</td>
<td>0.6</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>RECREATION AND CULTURE</td>
<td>1.8</td>
<td>1.0</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td>1.6</td>
<td>1.1</td>
<td>2.3</td>
<td></td>
</tr>
</tbody>
</table>

(a) Dili weights used as proxy for National weights in Series 1.
(b) Series 1 weights at the link period with Series 2. Series 1 CPI used a variable weights approach whereby the weights changed throughout the life of the series.
(c) Series 2 weights are derived from expenditure estimates from the 2011 HIES revalued to December 2012 prices (for details see the price updating section further down).

Changes in weighting patterns

Appendix 3 contains the complete National weighting pattern for the Series 2 CPI (at December 2012). An electronic version of the Series 1 and Series 2 weighting patterns is also available on the NSD website, see [www.dne.mof.gov.tl](http://www.dne.mof.gov.tl). Before analysing the changes to the CPI weighting pattern over time, a number of points should be noted.

- Series 2 weights include the changes in the commodity classification shown in Appendix 2.
- Compositional changes should be taken into account when comparisons are made across Series weights.
- Series 1 National weights were based on expenditure patterns for Dili only. Results of the 2011 HIES indicate that Dili weights are not a good approximation for National weights for some parts of the CPI.

Some additional issues are discussed below.

Quantities underlying the weights are fixed

Although the weights are expressed in terms of expenditure shares, it is not the expenditure shares (where expenditure is given by the product of quantity and price) that are held constant (or fixed) from period to period. What are held constant are the quantities of products underpinning these expenditures. Weights are presented in expenditure terms because it is not possible to present quantity weights in a comparable way. The relative expenditure shares of items will change over time in response to changes in relative prices. The weights in the new series CPI generally relate to expenditures in 2011, re-valued using price movements in the CPI, to December 2012 prices (the link period) to maintain fixed '2011 quantities'.

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Weights are relative

The weight of an expenditure class in any particular CPI series depends on how expenditure on that class compares to total expenditure (i.e. expenditure shares), rather than the absolute expenditure. If the increase in expenditure on a particular expenditure class in the reference period is greater than the increase in total expenditure between two series, the weight of that expenditure class will increase. For example, between the old and new series, the expenditure share on 'Transport' increased from 3.6% in December 2012 to 6.4% for the new series. Conversely, if the increase in expenditure on a particular expenditure class in the reference period is less than the increase in total expenditure between two series, the weight of that expenditure class will decrease. For example, the expenditure share on 'Clothing and Footwear' increased by less than the increase in overall expenditures. As a result, the weight of 'Clothing and Footwear' fell from 7.2% in December 2012 to 5.9% in the new series.

Changes to coverage

Changes in the coverage of the CPI basket will also affect weighting patterns.

Examples of expenditure classes with large increases in weight

The weight for 'Transport' increased from 3.6% in December 2012 to 6.4% for the new series. The increase was due to both a price and volume increase. The volume increase was driven by increases in the use of motorbikes and cars. The 'Communications' weight increased from 0.6% in December 2012 to 2.3% for the new series. The increase was due to a volume increase. The volume increase was driven by increases in the use of mobile phones and electronic devices with internet access.

Examples of expenditure classes with large decreases in weight

The 'Health' weight decreased from 3.8% in December 2012 to 0.7% for the new series. This is mostly due to a coverage change where 'Personal care' was moved from 'Health' to 'Goods and services for routine household maintenance'. The 'Clothing and Footwear' weight fell from 7.2% in December 2012 to 5.9% in the new series.

DESCRIPTION OF SERIES 2 WEIGHTING PATTERN: SOURCES AND METHODS

The Series 2 CPI is consistent with Series 1 and has been designed as a general measure of price inflation for Timorese households as a whole. The CPI measures changes in the price of a fixed basket of goods and services acquired by consumers in both urban and rural private households.

In determining the composition of the CPI basket (and item weights), the objective is to reflect the contemporary experiences of households. The starting point for compiling the weights for the Series 2 CPI was the results of the 2011 HIES. The HIES obtained information on the spending habits of Timorese households.

The 2011 HIES results are based on the complete sample of 4,800 households, which covers all of Timor-Leste over the period 24 January 2011 to 23 January 2012.

The detailed HIES expenditure items were mapped to form a HIES to CPI correspondence. Where a one-to-one correspondence could not be established due to the broad nature of a HIES item, splits were determined subjectively across appropriate expenditure classes. In most cases where splits were required, the expenditures involved were relatively small.

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The HIES to CPI correspondence was applied to the HIES data to derive household average monthly expenditure at the expenditure class level for 2011. The average monthly expenditure was used to analyse both the 2011 expenditure and the changes since the introduction of the Series 1 CPI.

**Adjustments**

Although the HIES provides a comprehensive coverage of household expenditure, some adjustments were made. In these cases the adjustments to expenditure were made based on correlation with other sources of data.

The HIES expenditure for ‘rice’ appeared a little high, and for ‘maize’ a little low when compared with the 2011 National Accounts estimates for Household Final Consumption Expenditure (HFCE) for these items. It is possible that some expenditure for ‘maize’ may have been coded as ‘rice’ in the 2011 HIES. The HIES estimate of ‘rice’ was adjusted down by the difference between HIES and the National Accounts estimate, and the difference allocated to ‘maize’ expenditure.

The dry conditions in 2011 had some impact on local rice production. The HIES split between ‘imported rice’ and ‘local rice’ was adjusting to reflect more normal production quantities.

The National Accounts 2011 expenditure estimate for ‘Telecommunication equipment and services’ was slightly higher than the HIES estimate. The National Accounts estimate is considered a more accurate estimate as it is based on administrative data.

**Price Updating (revaluation)**

The 2011 HIES data were revalued to December 2012 prices. The revaluation was done by calculating the ratio of the December quarter 2012 price index to the Annual 2011 price index for each expenditure class. The annual price indexes were calculated as the average of the four quarterly indexes for 2011. The resulting ratio was then applied to the 2011 expenditures.

**ANALYTICAL SERIES**

Weights for the analytical series (Dili and Ex-Dili indexes) will be updated to reflect the Series 2 weighting patterns. The Series 2 weights are shown in Appendix 3.

The analytical series will be published as Tables 2 and 3 in the monthly CPI publication. Time series data for these analytical series will also be available electronically on a monthly basis on the DNE website.

**NEW INDEX REFERENCE PERIOD**

Re-referencing resets the index reference period of the basket to a period in which all index numbers have a value of 100.0. It does not change the relative movement between periods.

From January 2013, all index numbers will be calculated on a new index reference period of December 2012. This will result in the index numbers for each index series being reset to 100.0 as at December 2012. Period-to-period percentage changes may differ slightly to those previously published due to rounding and the re-referencing. These differences do not constitute a revision.

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NEW PUBLICATION FORMAT

The Series 2 CPI will be introduced in respect of January 2013. The headline CPI will be the Timor-Leste index, which will henceforth be available on a monthly basis. In addition, analytical indexes will also be available for Dili and Ex-Dili. In addition to the period to period percentage changes, the tables will also provide “points contribution”, which will show the contribution that individual expenditure groups and classes make to the overall movement in the indexes.

The changes described above will necessitate changes in the publication format. So as to assist users with advance notice of the changes, Appendix 4 provides a mock up of the tables to be published with the Series 2 CPI.

FURTHER INFORMATION

In March 2013 NSD will publish a document “A Guide to the Timor-Leste CPI” to coincide with the first data release of the Series 2 CPI. This document will provide information on the methodology associated with the construction and compilation of the CPI. It will be available in PDF format on the NSD website.
APPENDIX 1: USER CONSULTATION

In October 2012 NSD gave a presentation to the Consultative Committee on Financial Management (CCFM), chaired by the Minister for Finance, on issues under consideration in the current review and re-weighting of the Timor-Leste Consumer Price Index. The presentation stimulated a general discussion about how best to measure inflation and the range of price indexes that Timor-Leste might aspire to compile so that more thorough analysis of price change/inflationary pressures in the Timor-Leste economy could be monitored.

There were two proposals raised in which NSD was asked to consider:

First, NSD was asked that consideration be given to having analytical indexes compiled monthly, separately for each District.

NSD view:

To compile a full CPI for each District would require that reliable household expenditure weights would be available for each of the separate Districts (i.e., it would be critical that the expenditure weights reliably reflect household spending patterns in each of the Districts). This was not part of the design of the 2011 Household Income and Expenditure Survey (HIES), and as a result it is not technically possible to compile a reliable CPI for each of the ex-Dili Districts as part of the Series 2 CPI work.

If the intention is to require a complete CPI for each District, then the next HIES would need to be designed to enable reliable District household spending patterns to be produced. Inevitably, this would require a much larger sample size than for the 2011 Survey. Such a decision should not be taken lightly: it would raise important issues of cost, feasibility of collection, reporting burden on households and management capacity within NSD to undertake such a survey. This matter will be reconsidered during the design phase of the next HIES.

Second, NSD was asked to consider expanding the range of inflation measures. The Committee was informed by the Independent Consultant that it is usual for policy analysts to focus on the final stage of the “production pipeline”, i.e. household spending, as the point at which headline inflation is measured. This is certainly true for those Central Banks around the world that target inflation as the underlying objective of monetary policy. That said, it is also usual for countries to compile a range of other price indexes that measure price change at other points in the production pipeline. These other price indexes include producer price indexes, labour price indexes, and merchandise trade price indexes.

NSD view:

NSD’s top priority will be to introduce the Series 2 CPI in respect of January 2013 and to ensure that it performs satisfactorily thereafter, including that it be re-weighted on a more frequent basis than has been the case to date. Beyond this, NSD will build into its medium term work program a phased approach to compilation of a more extensive range of price indexes.

NSD also conducted a CPI PUBLIC SEMINAR on 16 November 2012, to enable NSD to hear directly from the community on the usefulness of the CPI and on the proposals contained in the Information Paper - Review of Timor-Leste Consumer Price Index (CPI) 2012: Issues for Consideration

Presentations were provided by representatives of the Australian Bureau of Statistics, which is providing technical support for the CPI review. Also providing assistance was Robert Edwards, an Independent Consultant who is providing peer review support to the CPI review and re-weighting work.

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There was useful discussion after the presentations in which a wide range of issues were covered. The main themes of the discussion are summarised below.

1. Identifying the main causes of inflation

The seminar stimulated a discussion about how to identify the main causes of inflation, from an assortment of possible influences like high government spending, lack of local productive capacity, foreign exchange rates, and supply bottlenecks.

(a) One area where the CPI can assist with this debate is through analysing the impact that imported goods have on inflation. An international trade exposure series would greatly assist in identifying domestically sourced versus internationally sourced price pressures. NSD will explore methods to develop a price index series that will decompose the CPI expenditure classes into tradable and non-tradable items. Much of this work will depend on obtaining the required information from the Customs agency.

(b) To provide more information on the main drivers of price inflation in the CPI, NSD will publish points contribution (to the All Groups) data for all CPI components starting with the first release of the Series 2 CPI on February 20, 2013.

2. Make price surveys representative of the patterns of purchases across all of Timor-Leste, not just in the urban (more wealthy) areas

(a) Timor-Leste is a diverse country where some 26% of the population lives in Dili and accounts for around 85% of the country’s expenditure on goods and services. The composition of the basket and the relative importance of items in it relate to the Timor-Leste population group as a whole - it represents the expenditures of all in-scope households, including the expenditure pattern of the wealthier Dili residents. The CPI International manual recommends that weights for the CPI should be based on expenditure data, rather than on population counts.

(b) The introduction of the Series 2 CPI will offer separate weighting patterns for Dili and Ex-Dili based on expenditures from the 2011 HIES.

(c) As part of the CPI review, NSD has examined ways of rationalising its current price collection activity in order to accommodate a monthly National CPI. To cover the widest possible spread of prices across Timor-Leste without jeopardising the quality of the CPI presents many challenges. However, the pricing strategy adopted for the new series CPI will actually increase the coverage of districts where prices will be collected, not reduce the coverage. The composition of the basket for these additional places will include specific items purchased in district markets (like rice, vegetables, sugar, areca nut, tobacco, kerosene, cooking oils, and microlet fares).

3. Concern that the CPI is not measuring the price inflation experience for low income households

(a) The CPI is designed to measure changes in prices experienced by Timor-Leste private households in aggregate, so it does not directly measure price inflation faced by poorer households in isolation. To measure the inflation experience for low income households would require the construction of a specific analytical index based on income determination.

(b) The price inflation experienced by households outside of Dili will be published in an analytical index called Ex-Dili. This index will have a weighting pattern different to Dili and is based on 2011 HIES regional expenditure results. Since low income households are more prevalent in the Ex-Dili districts, this index may be the best available indicator in the short term of the inflation experience of the low income households. After the Series 2 CPI has been bedded down, NSD will further analyse the 2011 HIES.
results to determine if reliable weights can be calculated so that an analytical index for low income households can be compiled.

(c) There were other suggestions put forward to improve the coverage of the CPI. One such suggestion was to publish ‘rice’ as a separate component in the CPI. This would assist in understanding the inflationary impact of rice (which has a significant weight in the CPI) on Timor-Leste households, in particular, low income households. NSD has accepted this suggestion and rice will be a separate expenditure class in the Series 2 CPI.
APPENDIX 2: CHANGES BETWEEN THE SERIES 1 AND SERIES 2 CPI CLASSIFICATION

One of the outcomes from the review of the Timor-Leste CPI was to update the commodity classification used to categorise the goods and services acquired by households, to ensure it reflected contemporary wording and groupings. In doing so, one of the issues considered was the degree to which the current classification, the CPI commodity classification, could be aligned with the United Nations Classification of Individual Consumption according to Purpose (COICOP). To enable greater international comparability of price inflation a review was undertaken to align where possible with COICOP.

SERIES 2 CPI COMMODITY CLASSIFICATION

<table>
<thead>
<tr>
<th>Expenditure class</th>
<th>Correspondence with Series 1</th>
<th>Type of change. See footnote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 FOOD AND NON-ALCOHOLIC BEVERAGES</td>
<td>(Previously Food)</td>
<td>(a)</td>
</tr>
<tr>
<td>1.1 Bread and cereals (excluding rice)</td>
<td>(Previously Cereals, roots and their products)</td>
<td>(b)</td>
</tr>
<tr>
<td>1.2 Rice</td>
<td>Previously part of 1.1(Cereals, roots and their products)</td>
<td>(d)</td>
</tr>
<tr>
<td>1.3 Meat</td>
<td>(Previously Meat and meat products)</td>
<td>(a)</td>
</tr>
<tr>
<td>1.4 Fish and seafood</td>
<td>Previously 1.3 (fresh fish) and 1.4 (preserved fish)</td>
<td>(d)</td>
</tr>
<tr>
<td>1.5 Milk, cheese and eggs</td>
<td>Previously 1.5 (Eggs, milk and their products)</td>
<td>(a)</td>
</tr>
<tr>
<td>1.6 Oils and fats</td>
<td>Previously 1.10 (Fats and oils)</td>
<td>(a)</td>
</tr>
<tr>
<td>1.7 Fruit</td>
<td>Previously 1.8</td>
<td>(a)</td>
</tr>
<tr>
<td>1.8 Vegetables</td>
<td>Previously 1.6</td>
<td>(a)</td>
</tr>
<tr>
<td>1.9 Sugar, jam, honey, chocolate and confectionary</td>
<td>New</td>
<td>(c)</td>
</tr>
<tr>
<td>1.10 Food products n.e.c.</td>
<td>New</td>
<td>(c)</td>
</tr>
<tr>
<td>1.11 Coffee, tea and cocoa</td>
<td>New Previously part of 1.13 (Non-alcoholic drinks)</td>
<td>(b)</td>
</tr>
<tr>
<td>1.12 Mineral waters, soft drinks, fruit and vegetable juices</td>
<td>New Previously part of 1.13 (Non-alcoholic drinks)</td>
<td>(b)</td>
</tr>
<tr>
<td>1.13 Prepared food/meals</td>
<td>No change</td>
<td>(a)</td>
</tr>
<tr>
<td>2 ALCOHOL AND TOBACCO</td>
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<td>(a)</td>
</tr>
<tr>
<td>2.1 Alcoholic beverages</td>
<td>(Previously Alcohol)</td>
<td>(a)</td>
</tr>
<tr>
<td>2.2 Tobacco</td>
<td>No change</td>
<td>(a)</td>
</tr>
<tr>
<td>3 CLOTHING AND FOOTWEAR</td>
<td>No change</td>
<td>(a)</td>
</tr>
<tr>
<td>3.1 Garments for men</td>
<td>(Previously Men's clothing)</td>
<td>(a)</td>
</tr>
<tr>
<td>3.2 Garments for women</td>
<td>(Previously Women's clothing)</td>
<td>(a)</td>
</tr>
<tr>
<td>3.3 Garments for infants and children</td>
<td>(Previously Children's and infants' clothing)</td>
<td>(a)</td>
</tr>
<tr>
<td>3.4 Footwear and clothing accessories</td>
<td>(Previously Footwear and personal effects)</td>
<td>(a)</td>
</tr>
<tr>
<td>4 HOUSING</td>
<td>No change</td>
<td>(a)</td>
</tr>
<tr>
<td>4.1 Actual rentals paid by tenants</td>
<td>(Previously House rental)</td>
<td>(a)</td>
</tr>
<tr>
<td>4.2 Maintenance and repair of the dwelling</td>
<td>(Previously House building costs)</td>
<td>(a)</td>
</tr>
<tr>
<td>4.3 Water, electricity, gas and other fuels</td>
<td>(Previously Household fuel and utilities)</td>
<td>(a)</td>
</tr>
<tr>
<td>5 FURNISHINGS, HOUSEHOLD EQUIPMENT and ROUTINE HOUSEHOLD MAINTENANCE</td>
<td>(Previously Household furnishings, supplies and services)</td>
<td>(a)</td>
</tr>
<tr>
<td>5.1 Household furniture and textiles</td>
<td>Previously part 5.1 (Household furnishings)</td>
<td>(b)</td>
</tr>
<tr>
<td>5.2 Household appliances</td>
<td>Previously part 5.1 (Household furnishings)</td>
<td>(b)</td>
</tr>
<tr>
<td>5.3 Goods and services for routine household maintenance</td>
<td>Previously 5.2 (Household supplies and services)</td>
<td>(a)</td>
</tr>
<tr>
<td>6 HEALTH</td>
<td>No change</td>
<td>(a)</td>
</tr>
<tr>
<td>6.1 Medical products, appliances and equipment</td>
<td>Previously part 6.1 (Health services and pharmaceuticals)</td>
<td>(b)</td>
</tr>
<tr>
<td>6.2 Medical and Hospital services</td>
<td>Previously part 6.1 (Health services and pharmaceuticals)</td>
<td>(b)</td>
</tr>
</tbody>
</table>

Introduction of Series 2 Timor-Leste Consumer Price Index - May 2013
7 TRANSPORT
   7.1 Purchase of vehicles
   7.2 Operation of personal transport equipment
   7.3 Public transport services

8 COMMUNICATION
   8.1 Telecommunication equipment and services

9 RECREATION AND CULTURE
   9.1 Audio-visual, photographic and information processing equipment
   9.2 Recreational items and cultural services
   9.3 Newspapers, books and stationery

10 EDUCATION
   10 Education

Footnotes
(a) Series continuing, name change and/or move of series in the classification order
(b) Series continuing, minor compositional change
(c) New series, base of Dec 2012 = 100.0 as no backcast data available
(d) New series, backcasted
## APPENDIX 3: SERIES 2 CPI WEIGHTS

Percentage contribution to the All Groups CPI in December 2012

<table>
<thead>
<tr>
<th>Group and Expenditure Class</th>
<th>Dili (Analytical series)</th>
<th>Ex-Dili</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 FOOD AND NON-ALCOHOLIC BEVERAGES</strong></td>
<td>61.89</td>
<td>75.43</td>
<td>64.32</td>
</tr>
<tr>
<td>1.1 Bread and cereals (excluding rice)</td>
<td>4.29</td>
<td>5.23</td>
<td>4.46</td>
</tr>
<tr>
<td>1.2 Rice</td>
<td>15.08</td>
<td>26.79</td>
<td>17.18</td>
</tr>
<tr>
<td>1.3 Meat</td>
<td>8.36</td>
<td>6.34</td>
<td>8.00</td>
</tr>
<tr>
<td>1.4 Fish and seafood</td>
<td>3.00</td>
<td>1.15</td>
<td>2.67</td>
</tr>
<tr>
<td>1.5 Milk, cheese and eggs</td>
<td>1.78</td>
<td>0.69</td>
<td>1.59</td>
</tr>
<tr>
<td>1.6 Oils and fats</td>
<td>3.05</td>
<td>4.26</td>
<td>3.26</td>
</tr>
<tr>
<td>1.7 Fruit</td>
<td>2.41</td>
<td>1.62</td>
<td>2.27</td>
</tr>
<tr>
<td>1.8 Vegetables</td>
<td>14.74</td>
<td>18.67</td>
<td>15.45</td>
</tr>
<tr>
<td>1.9 Sugar, jam, honey, chocolate and confectionary</td>
<td>3.12</td>
<td>3.59</td>
<td>3.20</td>
</tr>
<tr>
<td>1.10 Food products n.e.c.</td>
<td>2.75</td>
<td>3.89</td>
<td>2.96</td>
</tr>
<tr>
<td>1.11 Coffee, tea and cocoa</td>
<td>1.90</td>
<td>2.87</td>
<td>2.07</td>
</tr>
<tr>
<td>1.12 Mineral waters, soft drinks, fruit and vegetable juices</td>
<td>0.76</td>
<td>0.23</td>
<td>0.66</td>
</tr>
<tr>
<td>1.13 Prepared food/meals</td>
<td>0.64</td>
<td>0.08</td>
<td>0.54</td>
</tr>
<tr>
<td><strong>2 ALCOHOL AND TOBACCO</strong></td>
<td>4.44</td>
<td>6.88</td>
<td>4.88</td>
</tr>
<tr>
<td>2.1 Alcohol</td>
<td>1.30</td>
<td>1.60</td>
<td>1.35</td>
</tr>
<tr>
<td>2.2 Tobacco</td>
<td>3.14</td>
<td>5.27</td>
<td>3.52</td>
</tr>
<tr>
<td><strong>3 CLOTHING AND FOOTWEAR</strong></td>
<td>6.33</td>
<td>3.67</td>
<td>5.85</td>
</tr>
<tr>
<td>3.1 Garments for men</td>
<td>1.26</td>
<td>0.89</td>
<td>1.20</td>
</tr>
<tr>
<td>3.2 Garments for women</td>
<td>0.94</td>
<td>0.62</td>
<td>0.88</td>
</tr>
<tr>
<td>3.3 Garments for infants and children</td>
<td>2.12</td>
<td>1.20</td>
<td>1.95</td>
</tr>
<tr>
<td>3.4 Footwear and clothing accessories</td>
<td>2.02</td>
<td>0.96</td>
<td>1.83</td>
</tr>
<tr>
<td><strong>4 HOUSING</strong></td>
<td>6.38</td>
<td>2.45</td>
<td>5.68</td>
</tr>
<tr>
<td>4.1 Actual rentals paid by tenants</td>
<td>0.84</td>
<td>0.00</td>
<td>0.69</td>
</tr>
<tr>
<td>4.2 Maintenance and repair of the dwelling</td>
<td>1.56</td>
<td>0.69</td>
<td>1.40</td>
</tr>
<tr>
<td>4.3 Water, electricity, gas and other fuels</td>
<td>3.99</td>
<td>1.76</td>
<td>3.59</td>
</tr>
<tr>
<td><strong>5 FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE</strong></td>
<td>4.48</td>
<td>2.65</td>
<td>4.15</td>
</tr>
<tr>
<td>5.1 Household furniture and textiles</td>
<td>0.37</td>
<td>0.08</td>
<td>0.32</td>
</tr>
<tr>
<td>5.2 Household appliances</td>
<td>0.40</td>
<td>0.20</td>
<td>0.36</td>
</tr>
<tr>
<td>5.3 Goods and services for routine household maintenance</td>
<td>3.71</td>
<td>2.37</td>
<td>3.47</td>
</tr>
<tr>
<td>Group and Expenditure Class</td>
<td>Dili (Analytical series)</td>
<td>Ex-Dili</td>
<td>National</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>--------------------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>6 HEALTH</td>
<td>0.84</td>
<td>0.33</td>
<td>0.75</td>
</tr>
<tr>
<td>6.1 Medical products, appliances and equipment</td>
<td>0.52</td>
<td>0.27</td>
<td>0.48</td>
</tr>
<tr>
<td>6.2 Medical and Hospital services</td>
<td>0.32</td>
<td>0.06</td>
<td>0.27</td>
</tr>
<tr>
<td>7 TRANSPORT</td>
<td>7.08</td>
<td>3.35</td>
<td>6.41</td>
</tr>
<tr>
<td>7.1 Purchase of vehicles</td>
<td>0.65</td>
<td>0.30</td>
<td>0.59</td>
</tr>
<tr>
<td>7.2 Operation of personal transport equipment</td>
<td>3.43</td>
<td>1.40</td>
<td>3.07</td>
</tr>
<tr>
<td>7.3 Transport services</td>
<td>3.00</td>
<td>1.65</td>
<td>2.76</td>
</tr>
<tr>
<td>8 COMMUNICATION</td>
<td>2.51</td>
<td>1.39</td>
<td>2.31</td>
</tr>
<tr>
<td>8.1 Telecommunication equipment and services</td>
<td>2.51</td>
<td>1.39</td>
<td>2.31</td>
</tr>
<tr>
<td>9 RECREATION and CULTURE</td>
<td>3.39</td>
<td>2.98</td>
<td>3.32</td>
</tr>
<tr>
<td>9.1 Audio-visual, photographic and information processing equipment</td>
<td>0.02</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>9.2 Recreational items and cultural services</td>
<td>2.12</td>
<td>2.22</td>
<td>2.14</td>
</tr>
<tr>
<td>9.3 Newspapers, books and stationery</td>
<td>1.25</td>
<td>0.76</td>
<td>1.16</td>
</tr>
<tr>
<td>10 EDUCATION</td>
<td>2.65</td>
<td>0.87</td>
<td>2.34</td>
</tr>
<tr>
<td>10.1 Education</td>
<td>2.65</td>
<td>0.87</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Any discrepancies between totals and sums of components are due to rounding.

An electronic version of the full weighting pattern for both Series 1 and Series 2 can be found in the CPI Historical Weighting Pattern file on the NSD website.
## APPENDIX 4: MOCK-UP TABLES FOR SERIES 2

### KEY FIGURES TABLE

<table>
<thead>
<tr>
<th>TIMOR-LESTE CPI</th>
<th>January 2013</th>
<th>KEY FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERCENTAGE CHANGE</strong></td>
<td>Monthly</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>Dec-12</td>
<td>Jan-12</td>
</tr>
<tr>
<td></td>
<td>to</td>
<td>to</td>
</tr>
<tr>
<td></td>
<td>Jan-13</td>
<td>Jan-13</td>
</tr>
</tbody>
</table>

### All groups CPI

All groups excluding Housing

- Food and non-alcoholic beverages
- Alcohol and tobacco
- Clothing and footwear
- Housing
- Furnishings, household equipment and routine household maintenance
- Health
- Transport
- Communication
- Recreation and culture
- Education
Introduction of Series 2 Timor-Leste Consumer Price Index - May 2013

FORMAT FOR TABLES 1 (Timor-Leste CPI), 2 (Dili Analytical Index) and 3 (Ex-Dili Analytical Index)

<table>
<thead>
<tr>
<th>INDEX NAME (eg. TIMOR-LESTE CPI)</th>
<th>INDEX NUMBERS</th>
<th>PERCENTAGE CHANGE</th>
<th>POINTS CONTRIBUTION</th>
<th>CHANGE IN POINTS CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONTH (eg. JANUARY 2013)</td>
<td>Jan-12 Dec-12</td>
<td>Dec-12 to Jan-13</td>
<td>Dec-12 to Jan-13</td>
<td>Dec-12 to Jan-13</td>
</tr>
</tbody>
</table>

Groups and Expenditure Class

1 FOOD AND NON-ALCOHOLIC BEVERAGES
   1.1 Bread and cereals (excluding rice)
   1.2 Rice
   1.3 Meat
   1.4 Fish and seafood
   1.5 Milk, cheese and eggs
   1.6 Oils and fats
   1.7 Fruit
   1.8 Vegetables
   1.9 Sugar, jam, honey, chocolate and confectionary
   1.10 Food products n.e.c.
   1.11 Coffee, tea and cocoa
   1.12 Mineral waters, soft drinks, fruit and vegetable juices
   1.13 Prepared food/meals

2 ALCOHOL AND TOBACCO
   2.1 Alcohol
   2.2 Tobacco

3 CLOTHING AND FOOTWEAR
   3.1 Garments for men
   3.2 Garments for women
   3.3 Garments for infants and children
   3.4 Footwear and clothing accessories

4 HOUSING

Introduction of Series 2 Timor-Leste Consumer Price Index - May 2013
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4.1 Actual rentals paid by tenants
4.2 Maintenance and repair of the dwelling
4.3 Water, electricity, gas and other fuels

5 **FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE**
5.1 Household furniture and textiles
5.2 Household appliances
5.3 Goods and services for routine household maintenance

6 **HEALTH**
6.1 Medical products, appliances and equipment
6.2 Medical and Hospital services

7 **TRANSPORT**
7.1 Purchase of vehicles
7.2 Operation of personal transport equipment
7.3 Transport services

8 **COMMUNICATION**
8.1 Telecommunication equipment and services

9 **RECREATION and CULTURE**
9.1 Audio-visual, photographic and information processing equipment
9.2 Recreational items and cultural services
9.3 Newspapers, books and stationery

10 **EDUCATION**
10.1 Education

ALL GROUPS
ALL GROUPS EXCLUDING HOUSING

Note: For some components it will not be possible to publish annual changes until twelve months data have been compiled. These cells will be denoted by ‘n/a.’